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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/080,422

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Meir Feder

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EXAMINER

CZEKAJ, DAVID J

ART UNIT

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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/080,422	<b>Applicant(s)</b> FEDER ET AL.	
	<b>Examiner</b> DAVID CZEKAJ	<b>Art Unit</b> 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-18,37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-18,37 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-18, and 37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-18, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6118817).

Regarding claim 1, Wang discloses an apparatus that relates to digital signal compression (Wang: column 1, lines 53-55). This apparatus comprises "determining a macroblock of the image, the macroblock being less than the entire image, the block being determined by changes occurring in the block, wherein the changes comprise differences between a previously transmitted image and a current image" (Wang: column 11, lines 30-50, wherein by comparing pixels of an current and previous frame, Wang is comparing the macroblocks of the frame), "determining a quality of the macroblock based on a rate of change associated with the block" (Wang: column 12, lines 16-35, wherein the quality is indicated by the quantization parameter), "transmitting the macroblock of the image at the quality" (Wang: figures 1 and 11), "determining

that the macroblock of the image did not change” (Wang: column 12, lines 16-25, wherein the no significant increase indicates the block did not change), and “in response to determining that the block did not change, generating and transmitting a block of enhancement data such that the block improves the quality of the image, wherein the generating and transmitting are not performed in response to determining the block had changed” (Wang: column 11, line 29 – column 12, line 41). While Wang fails to explicitly disclose blocks of enhancement data, Wang does disclose adjusting the quantization parameter depending on the rate of change of the block (Wang: column 7, lines 30-39; column 11, line 29- column 12, line 41). By using a lower quantization parameter, Wang is using blocks of higher quality and thus increasing or enhancing the quality of the image. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the enhancement data in order to better help produce high quality output images.

Regarding claim 3, Wang discloses “generating without decoding previously used DCT coefficients” (Wang: figure 1, wherein the current DCT coefficients are used).

Regarding claims 4-7, although not disclosed, it would have been obvious make the static image not change for many frames or many seconds (Official Notice). Doing so would have been obvious in order to allow enough time to pass to verify the image was in fact static.

Regarding claim 8, Wang discloses “not to transmit data once a target quality is met” (Wang: figure 3, wherein the quality target is dependent on the target size).

Regarding claim 10, Wang discloses “the transport comprises an MPEG-type transport” (Wang: column 2, lines 1-8).

Regarding claim 11, Wang discloses “decoding the image using a standard MPEG decoder” (Wang: figure 13, wherein a decoder must be present in the receiving devices).

Regarding claim 12, although not disclosed, it would have been obvious to calculate a synchronization frame (Official Notice). Doing so would have been obvious in order to ensure the frames arrive at the correct time.

Regarding claims 13-14, Wang discloses “associating with the image an indication of a suitable target/initial quality for the image part” (Wang: figures 2-4).

Regarding claim 15, Wang discloses “associating with the image an indication of an expected rate of change of the part” (Wang: column 11, lines 35-41, wherein the expected rate of change is indicated by the absolute differences).

Regarding claims 16-17, Wang discloses “generating the indication by an image generator” (Wang: figure 1, wherein the image generator is the MPEG encoder).

Regarding claim 18, although not disclosed, it would have been obvious to generate the indication by analyzing a past profile of changes (Official Notice).

Doing so would have been obvious in order to successfully detect errors by having a tolerable range of motion values.

Regarding claim 38, Wang discloses "each of the blocks that do not change are periodically polled" (Wang: column 11, lines 35-45; column 12, lines 16-35, wherein the polling is the comparison).

3. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (6118817) in view of Schaar et al. (6785334), (hereinafter referred to as "Schaar").

Regarding claim 37, note the examiners rejection for claim 1, and in addition, claim 37 differs from claim 1 in that claim 37 further requires the comparing and changes as claimed. Schaar teaches that prior art processing systems fail to efficiently utilize network bandwidth (Schaar: column 1, lines 42-45). To help alleviate this problem, Schaar discloses "determining a first and second portion degree of change by comparing the data block in the second frame to the data block in the first frame, wherein the degree of change provides a representation of how different the portion of the image resulting from the second from is from the first portion" (Schaar: figure 1; column 3, lines 5-20, wherein the residual image provides the degree of change), and "encoding a third frame based on the two analysis's wherein the third frame comprises a first and second data block that correspond to the first and second portions of the image" (Schaar: figures 1-3). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to implement

the comparing taught by Schaar in order to obtain an apparatus that utilizes the entire network bandwidth.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Czekaj/  
Primary Examiner, Art Unit 2621